

## 4<sup>th</sup> Grade Math Curriculum

In fourth grade, students will be building on their arithmetic abilities with whole numbers into the world of fractions. Fourth graders also are introduced to the standard system of measurement and basic geometry concepts like the point, the line, the plane, and several 2D shapes.

Our goal is to make sure students not only have a strong grasp of the math skills they need to master this year, but also have the confidence they need to explore and think as they continue to learn about the world around them.

A fourth-grade math curriculum usually begins to step outside the arena of whole numbers and into the area of numbers that are between those integers. The following information will explain the steps you should take to meet your child's 4<sup>th</sup> grade math goals.

### What Math Should a 4<sup>th</sup> Grader Already Know?

A fourth-grade math student should be able to perform all four operations (addition, subtraction, multiplication and division) with whole numbers. Students should also have memorized the multiplication table through 12, so it's easy to move onto the next level in math without getting hung up on basic multiplication.

### What Do 4<sup>th</sup> Graders Learn in Math?

The major math concepts covered for a fourth-grade curriculum are:

- Multiplication Table (if not memorized yet)
- Operations with Fractions (addition, subtraction, multiplication and division)
- Arithmetic of Mixed Numbers and Improper Fractions
- Representing Word Problems with Math
- Finding the Perimeter and Area of Geometric Shapes
- Measurement in the Standard System

**SCHEDULING TIPS!** Be sure to include a bit of wiggle room in case your student needs extra time with a math topic. Also note that students may do Geometry at any time during the year.

For example, your schedule might look like this for a **Mastery Approach**:

<b>September</b> Fractions Session #1: (Beginner & Intermediate)	<b>October</b> Fractions Session #2: (Beginner & Intermediate Level)	<b>November</b> Fractions Session #3: (Beginner & Intermediate Level)	<b>December</b> Two weeks of extra practice if needed.
<b>January</b> Fractions Session #4 (Beginner & Intermediate Level)	<b>February</b> Fractions Session #5 (Beginner & Intermediate Level)	<b>March</b> Geometry #1-3	<b>April</b> Fractions Session #6 (Beginner & Intermediate Level)
<b>May</b> Fractions Session #7 (Beginner & Intermediate Level)	<b>June</b> Fraction Review Test  Math Camp	<b>July</b> Fractions #1-4: Advanced Level Labs	<b>August</b> Fractions #5-7 Advanced Level Labs  Arithmetic Review

And here's an example of your schedule using a **Spiral Approach**:

<b>September</b> Fractions Session #1: (Beginner)  Fractions Session #2: (Beginner)	<b>October</b> Fractions Session #3: (Beginner)  Fractions Session #4: (Beginner)	<b>November</b> Fractions Session #5: (Beginner Level)  Fractions Session #6: (Beginner Level)	<b>December</b> Fractions Session #7: (Beginner Level)
<b>January</b> Fractions Session #1 (Intermediate Level)  Fractions Session #2 (Intermediate Level)	<b>February</b> Fractions Session #3 (Intermediate Level)  Fractions Session #4 (Intermediate Level)	<b>March</b> Geometry #1-3  Opportunity for any make-up work or extra review	<b>April</b> Fractions Session #5 (Intermediate Level)  Spring Break
<b>May</b> Fractions Session #6 (Intermediate Level)  Fractions Session #7 (Intermediate Level)	<b>June</b> Fraction Review Test  Math Camp	<b>July</b> Fractions #1-4: Advanced Level Labs	<b>August</b> Fractions #5-7 Advanced Level Labs  Arithmetic Review

## 4<sup>th</sup> Grade Math Lesson Plan (34 weeks) – Spiral Approach

*Spiral Approach: Students complete just the Beginner Level (including workbook assignments) and then move onto next concept, returning to go into more depth for the second pass through the content in the Intermediate level. This approach is good for students that are quick to pick up concepts, enjoy variety and need a review on a regular basis to retain information.*

### **Summer Term: Review – not included in the 34 weeks count**

- Multiplication Table (For numbers 1-12 as needed)
- Arithmetic Review (Review before starting Fractions)

### **Fall Term: Fractions** *Spend two weeks on each of the following:*

- Session #1: Introduction to Fractions (Beginner Level)
- Session #2: Multiplying Fractions (Beginner Level)
- Session #3: Multiplying & Dividing Fractions (Beginner Level)
- Session #4: Addition & Subtraction with Same Denominators (Beginner Level)
- Session #5: Addition & Subtraction with Different Denominators (Beginner Level)
- Session #6: Mixed Numbers & Improper Fractions and Ratios (Beginner Level)
- Session #7: Mixed Numbers & Improper Fractions (Beginner Level)

### **Winter Term: Fractions** *Spend two weeks on each of the following:*

- Session #1: Introduction to Fractions (Intermediate Level)
- Session #2: Multiplying Fractions (Intermediate Level)
- Session #3: Multiplying & Dividing Fractions (Intermediate Level)
- Session #4: Addition & Subtraction with Same Denominators (Intermediate Level)
- Session #5: Addition & Subtraction with Different Denominators (Intermediate Level)
- Session #6: Mixed Numbers & Improper Fractions and Ratios (Intermediate Level)
- Session #7: Mixed Numbers & Improper Fractions (Intermediate Level)

### **Spring Term: Geometry (Join us Live in Spring!)** *Spend 1-2 weeks on each of the following:*

- Session #1: Geometry Basics
- Session #2: Area of Shapes
- Session #3: Composite Figures

## 4<sup>th</sup> Grade Math Lesson Plan (34 weeks) – Mastery Approach

*Mastery Approach: Students complete both Beginner and Intermediate Levels before moving to next concept. Good for students that prefer a slower, more in-depth study pace that focuses on just one new concept at a time.*

### **Summer Term: Review – not included in the 34 weeks count**

- Multiplication Table (For numbers 1-12 as needed)
- Arithmetic Review (Review before starting Fractions)

### **Fall Term: *Spend two weeks on each of the following***

- Session #1: Introduction to Fractions (Beginner Level)
- Session #1: Introduction to Fractions (Intermediate Level)
- Session #2: Multiplying Fractions (Beginner Level)
- Session #2: Multiplying Fractions (Intermediate Level)
- Session #3: Multiplying & Dividing Fractions (Beginner Level)
- Session #3: Multiplying & Dividing Fractions (Intermediate Level)

### **Winter / Spring Term: *Spend two weeks on each of the following***

- Session #4: Addition & Subtraction with Same Denominators (Beginner Level)
- Session #4: Addition & Subtraction with Same Denominators (Intermediate Level)
- Session #5: Addition & Subtraction with Different Denominators (Beginner Level)
- Session #5: Addition & Subtraction with Different Denominators (Intermediate Level)
- Session #6: Mixed Numbers & Improper Fractions and Ratios (Beginner Level)
- Session #6: Mixed Numbers & Improper Fractions and Ratios (Intermediate Level)
- Session #7: Mixed Numbers & Improper Fractions (Beginner Level)
- Session #7: Mixed Numbers & Improper Fractions (Intermediate Level)

### **Spring Term: Geometry (Join us LIVE in Spring!)**

- Session #1: Geometry Basics
- Session #2: Area of Shapes
- Session #3: Composite Figures